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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/727,387	12/04/2003	Kevin L. Robinson	LMC-34	7745
7590 05/18/2005				
PLEVY & HOWARD 600 NORTH EASTON ROAD WILLOW GROVE, PA 19090			EXAMINER LUU, CHUONG A	
			ART UNIT 2818	PAPER NUMBER

DATE MAILED: 05/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

E)

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/727,387	ROBINSON, KEVIN L.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Chuong A. Luu	2818	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 February 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) 1 and 2 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 3-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Election/Restrictions***

Applicant's election with traverse of method Group I, claims 3-11 which filed on February 25, 2005 is acknowledged. The traversal is on the ground(s) that a search and examination of the entire application would not place a serious burden on the Examiner. This is not found persuasive, because group I, claims 3-11 drawn to an integrated circuit, classified in class 257, subclass 194 and Group II, claims 1-2 drawn to a method for creating an operational integrated circuit, classified in class 438, subclass 167 are drawn to distinct inventions as noted in the previous office action. Applicant's objection to the restriction requirement is noted but the fact that the two groups fall in two different classes would require two different searches and is therefore an undue burden.

The requirement is still deemed proper and is therefore made FINAL.

## **PRIOR ART REJECTIONS**

### **Statutory Basis**

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

### **The Rejections**

Claims 3-11 are rejected under 35 U.S.C. 102(e) as being anticipated by Taylor et al. (U.S. 6,853,014 B2).

Taylor discloses an optoelectronic circuit with

**(3); (10)** a first block comprising an enhancement mode PHEMT transistor on a substrate;

a second block comprising a depletion mode PHEMT transistor on the substrate, the second block operatively connected to the first block;

a third block comprising a power PHEMT transistor on the substrate, the third block operatively connected to at least one of the first block and the second block (see column 29, lines 49-67; columns 29, lines 1-67; columns 30, lines 1-67; columns 31, lines 1-67; column 32, lines 1-67; column 33, lines 1-67; column 34, lines 1-67; column 35, lines 1-67; column 36, lines 1-67; column 37, lines 1-67; column 38, lines 1-67; and column 39, lines 1-58. Figures 4A through 5F);

**(4)** further comprising: a: an analog input in communication with at least one of the first block, the second block, and the third block;

b: a clock input in communication with at least one of the first block, the second block, and the third block;

c: a digital output in communication with at least one of the first block, the second block, and the third block;

d: wherein the first block, the second block, and the third block connect to form an analog to digital converter (see Figures 4A through 5F);

(5) wherein the integrated circuit is a microwave and millimeter wave integrated circuit (MMIC) (see column 12, lines 42-59);

(6) wherein the circuit is a circuit capable of operating at a frequency within the range of from very low frequency up to and including X-band frequencies (see column 12, lines 42-59 and column 20, lines 42-50);

(7) an analog to digital converter, comprising an enhancement mode PHEMT device, a depletion mode PHEMT device, and a power PHEMT device on a single substrate (see Figures 4A through 5F);

(8) wherein the substrate comprises a group III-V element (see column 19, lines 33-42);

(9) wherein the substrate comprises gallium arsenide (see column 19, lines 33-42);

(11) wherein the plurality of integrated circuits can be interconnected to form a plurality of functional blocks which can be interconnected to create an operational electronic device (see Figures 4A through 5F).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chuong A. Luu whose telephone number is (571) 272-1902. The examiner can normally be reached on M-F (6:15-2:45).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David C. Nelms can be reached on (571) 272-1787. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Chuong Anh Luu  
Patent Examiner  
April 1, 2005